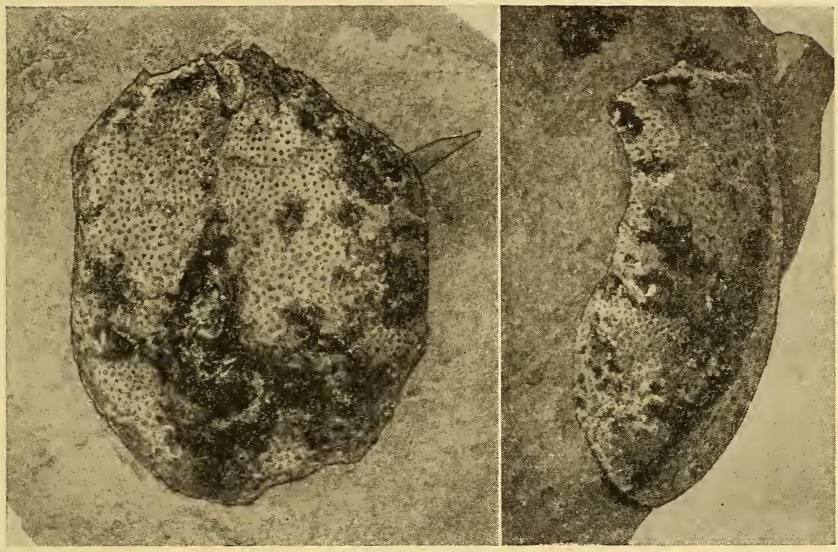

Fig. 5. (Left) *Eumorphocorystes schencki*. Dorsal view of carapace of holotype showing antero-lateral spine, x 1-1/2.

Fig. 6. (Right) *Eumorphocorystes schencki*. Left profile of same carapace, x 1-1/2.

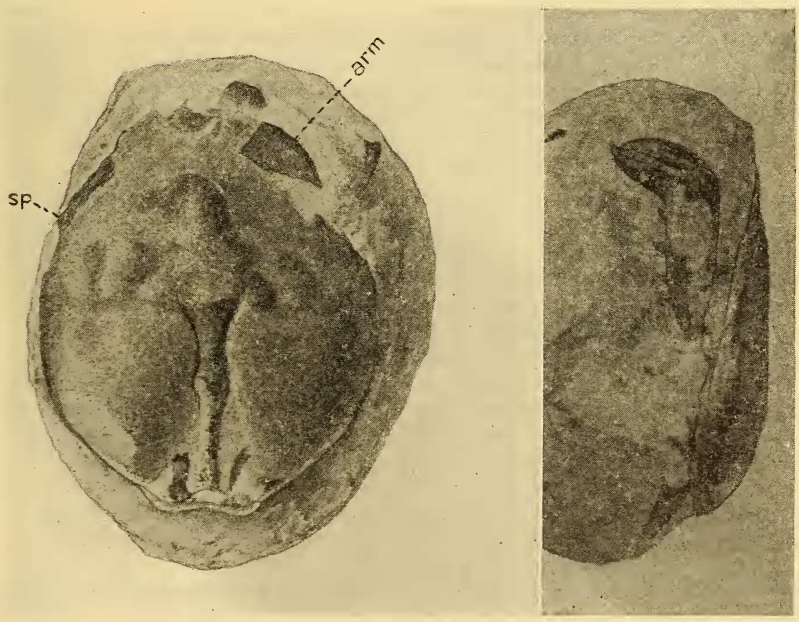

Fig. 7. (Left) *Eumorphocorystes leucosiae*. Dorsal view of carapace of holotype showing origin of lateral spine and portion of right arm, x 2.

Fig. 8. (Right) *Eumorphocorystes leucosiae*. Left side of holotype showing chela and fragments of legs, x 2.

Behind the lateral spine the angle of the carapace is rounded and the post-lateral margins are blunt and converge rapidly toward the posterior end. Exposed dorsal surface with some fine granulation near antero-lateral border; this is, however, not the true outer layer which is shown in the opposing half of the nodule (Fig. 4); its under surface is exposed and is covered with large, smooth, almost contiguous granules, which in the reverse or upper layer must appear as so many pits. At the lateral angle on what is the true right side there is a tooth pointing directly outward; this is a stout, blunt tooth similar to the one described above but straighter; one or two of the teeth or spines indicated may belong to the carpus of the cheliped.

Apparent length of carapace 24.6, width 23.7 mm.

Type-locality.—Tuffaceous sandstone on S. side of Alsea Bay about $\frac{1}{8}$ mile E. of B.M. 12, and $\frac{1}{4}$ mile E. of Waldport, Lincoln Co., Oregon; Sec. 20, T. 13 S., R. 11 W. Lower Oligocene. Sept. 14, 1926. Hubert G. Schenck. Cat. No. 371901, U. S. N. M.

Eumorphocorystes schencki, new species

Two carapaces, very convex from front to back, more so from side to side. Shape, broad oval, width 40 mm., length about 45. Front narrow, about $\frac{1}{3}$ as wide as carapace excluding spines; details obscure. A spine at anterior third of lateral margin or about 15 mm. behind margin of front; spine 6.7 mm. long, tapering to a slender point and directed well outward. Behind the spines the side margins are parallel along the middle third. Posterior margin somewhat wider than anterior, and slightly convex. Surface covered with large round pits, irregularly disposed, rarely in contact. A blunt, longitudinal, median carina the length of the carapace, becoming widest between the crescentic, branchio-cardiac grooves.

Type-locality.—Washington County, Oregon, near center of section 3, T. 2 N., R. 5 W., Beaver Creek road, Gales Creek to Timber, 3 miles S. of Timber. Keasey formation, "*Cardium weaveri*" zone, Oligocene, Holman ✻27. John T. Holman and H. G. Schenck collectors, 1931. Cat. No. 371921, U. S. N. M.

Eumorphocorystes (?) leucosiae, new species

Carapace subglobular, little longer than broad, posterior margin $\frac{1}{4}$ as wide as carapace, subtruncate, a little concave at middle; front about $\frac{1}{6}$ as wide as carapace; middle third of lateral margins subparallel. Surface covered with small pits, interspaces rough with fine granules; two longitudinal furrows through middle of carapace, near together at posterior third, diverging at either end, more so anteriorly; intermediate surface convex; branchial regions swollen. Lateral spine indicated at anterior third of lateral margin. Left chela uncovered, palm elongate, widening distally, half as wide as superior length, bluntly carinate above and armed with four spines below. Fingers strongly deflexed, tips crossing, prehensile edges wavy, meeting, outer edges carinate, carinae set off by a furrow. Fragment of arm rough like carapace.

Approximate length of type carapace 28.6, width 23 mm. A larger specimen is 30.3 x 26.2 mm.

Has much the appearance of a Leucosiid.

Type-locality.—Polk County, Oregon, center of E. line of N. W. quarter of Section 21, T. 6 S., R. 6 W.; very prominent cut in bank on E. side of Mill Creek, visible from road from Buell to Sheridan. Formation probably Keasey, "*Cardium weaveri*" zone, Oligocene. Holman ✻1. John T. Holman collector, 1931. Cat. No. 371902, U. S. N. M.

ZOOLOGY.—*Nematosis of a grass of the genus* Cyanodon *caused by a new nema of the genus* Tylenchus *Bast.*[1] N. A. Cobb, Bureau of Plant Industry.

Tylenchus[2] *tumefaciens* n. sp. $\frac{0.8}{1.2}$ ..... $\frac{5.6}{2.6}$ ..... $\frac{?}{?}$ ..... $\frac{80\text{–}88.5}{4.5}$ ..... $\frac{96.8}{1.9}$ 1.4mm

The posterior swelling of the oesophagus in this species seems to be somewhat set off from the intestine. The *reflexed portion of the ovary* contains the ova in about three ranges or rows, and appears one-third as wide as the corresponding portion of the body, and *has a length about twice as great as that of the neck.* At the blind end of the ovary there is a special single cell, taking up the full width, and having a distinct, clear, spherical nucleus, nearly one-third as wide as the cell. The nucleus contains a fairly granular spherical nucleolus half as wide as the nucleus itself. The immediately adjacent ova differ in having larger granular nuclei with somewhat larger but similar nucleoli. In this reflexed portion of the ovary the ova as they pass cephalad increase slightly in size, but do not exhibit much detail in structure. Passing around the flexure, the ova slowly begin to change in structure, and by the time they are opposite the blind end of the ovary, the nuclei begin to show chromosomes.

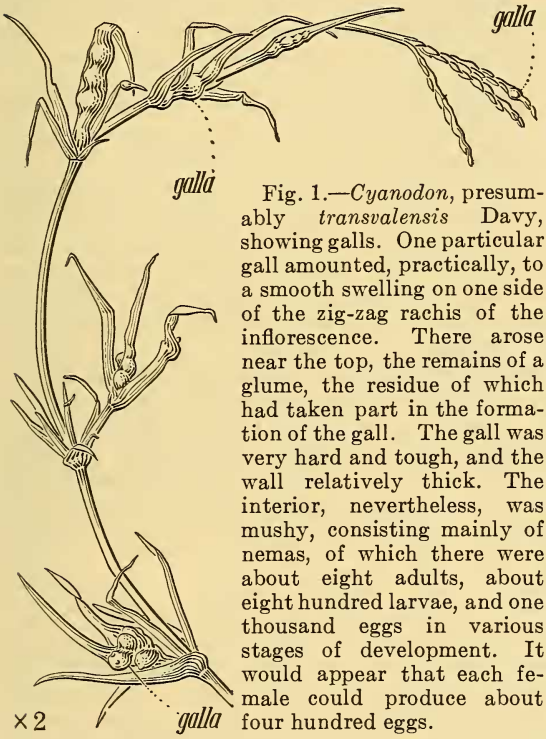

Fig. 1.—*Cyanodon*, presumably *transvalensis* Davy, showing galls. One particular gall amounted, practically, to a smooth swelling on one side of the zig-zag rachis of the inflorescence. There arose near the top, the remains of a glume, the residue of which had taken part in the formation of the gall. The gall was very hard and tough, and the wall relatively thick. The interior, nevertheless, was mushy, consisting mainly of nemas, of which there were about eight adults, about eight hundred larvae, and one thousand eggs in various stages of development. It would appear that each female could produce about four hundred eggs.

The large transverse *vulva spans the ventral fourth*, or even the third of the body, and is so massive that sometimes the *part of the body behind is bent dorsad at an obtuse angle.* The acute tail is nearly straight, slightly convex-conoid; it may be even slightly dorsally arcuate. *Anus inconspicuous. The massive uterus*, occupying most of the corresponding body cavity, *usually contains but one egg.* The spherical spermatozoa, packed in the uterus so as to be more or less polyhedral, are about one-fourth as wide as the body of the female; they are finally granular

[1] Received April 1, 1932.

[2] The genus name *Tylenchus* is used here instead of a recently discovered prior synonym because of the author's confidence that if and when the attention of the International Commission on Zoological Nomenclature is called to the matter it will decide that far greater confusion and inconvenience will be caused by following the rule of priority in this case than in not following it, and will abrogate the rule, as it has power to do in such cases.